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06/24/09

+ proposed claim amendments

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Application No: 10/639,677  
Attorney's Docket No: ALC 3414CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

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1. (Currently Amended) An apparatus that establishes services that utilize policy-enabled resources in a communications network, comprising:
- a first policy enforcement point (PEP) <sup>within a first domain,</sup> ~~residing on a network element of the~~ communications network, that ~~identifies-performs identification of~~ policy-enabled resources that are available and allocates requested policy-enabled resources to services;
- a first network resource controller (NRC) <sup>the first</sup> ~~within [a] domain on the~~ communications network that makes requests, from available policy-enabled resources, <sup>the</sup> ~~of any~~ policy-enabled resources within ~~[a] first domain~~ required to establish a particular service, ~~the requests from the available policy-enabled resources being separate from the identification of the policy enabled resources;~~ and
- a first resource policy layer (RPL) <sup>within the first domain</sup> that ~~establishes provisions to a the~~ particular service being established, and provisions the policy-enabled resources allocated to ~~that the particular service,~~ said first resource policy layer including a first policy description ~~protocol decision point (PDP),~~ wherein;

wherein policy management is separated from the management of policy enabled resources, and

16 said first NRC acts as a trusted entity that initiates ~~an association~~ *a direct contact*  
17 between said first PEP and said first PDP,  
18 said first PDP provides said first PEP with ~~a policy/policies~~ *contact* upon  
19 establishment of said ~~association~~ between said first PEP and first PDP, and  
20 when said first NRC requires resources from a second domain outside  
21 the first domain, said first NRC signals a request to a second NRC in said  
22 second domain, which acts as the trusted entity that initiates ~~an association~~ *a direct contact*  
23 between a second PEP in said second domain and said first PDP, said first  
24 PDP providing said second PEP with ~~a policy/the policies~~ *contact* upon establishment  
25 of said ~~association~~ between said second PEP and said first PDP, ~~whereby~~  
26 ~~there is a decoupling of policy management from the management of policy-~~  
27 ~~enabled resources.~~

\* 1 *Currently Amended*  
2. ~~(Previously Presented)~~ The apparatus as defined in claim 1, wherein said  
2 first PEP comprises a plurality of virtual PEPs, each virtual PEP being associated  
3 *with* ~~[1] a~~ respective service.

1 3-5. (Canceled)

\* 1 6. (Currently Amended) The apparatus as defined in claim 1, wherein the  
2 apparatus further comprises;

3 a second RPL associated with a ~~the~~ second domain comprising ~~the~~<sup>a</sup> second  
4 ~~[[PEP]]~~ PDP.

1 7. (Canceled)

1 8. (Previously Presented) The apparatus as defined in claim 1, wherein resource  
2 capability information descriptors are used for resource discovery and policy  
3 provisioning.

\* 1

9. (Currently Amended) A method of establishing services that utilize policy-  
2 enabled resources in a communications network, comprising:

3 identifying, at a first policy enforcement point (PEP), policy-enabled  
4 resources within a first domain that are available and allocating requested policy-  
5 enabled resources to services;

6 requesting, from available policy-enabled resources at a first network  
7 resource controller (NRC) <sup>within the first domain,</sup> any policy-enabled resources required to establish a  
8 particular service, ~~the requesting step being separate from the identifying step;~~

9 establishing the particular service with a first resource policy layer (RPL); <sup>within the first domain</sup>

10 and

11 provisioning, <sup>with the first resource policy layer</sup> to a the established service being established at a first resource  
12 policy layer (RPL), the policy-enabled resources allocated to ~~that the~~ established

13 service, said first resource policy layer including ~~at least one a~~ first policy  
14 ~~description protocol decision point (PDP), wherein:~~ <sup>wherein policy management is separated from the</sup>  
15 said first NRC acts as a trusted entity that initiates <sup>a direct contact</sup> ~~an association~~ between  
16 said first PEP and said first PDP,  
17 said first PDP provides said first PEP with ~~a policy policies~~ upon  
18 establishment of said <sup>contact</sup> ~~association~~ between said first PEP and said first PDP, and  
19 when said first NRC requires resources from a second domain outside the  
20 first domain, said first NRC signals a request to a second NRC in said second  
21 domain, which acts as the trusted entity that initiates <sup>a direct contact</sup> ~~an association~~ between a  
22 second PEP in said second domain and said first PDP, said first PDP providing said  
23 second PEP with ~~a policy the policies~~ upon establishment of said <sup>contact</sup> ~~association~~  
24 between said second PEP and said first PDP, ~~whereby there is a decoupling of policy~~  
25 ~~management from the management of policy-enabled resources.~~

1 10. (Canceled)

1 11. (Currently Amended) The method as defined in claim 9, wherein virtual  
2 PEPs of ~~a main the first~~ PEP are provisioned to provide resource services.

1 12. (Previously Presented) The method as defined in claim 11, wherein the  
2 virtual PEPs are provisioned to provide services in said second domain.

1 13. (Previously Presented) The method as defined in claim 12, wherein said first  
2 PEP and said second PEP are provisioned with the same service by said first PDP.

1 14-16. (Canceled)

\* 1 17. (Currently Amended) The apparatus as defined in claim 1, wherein the first  
2 PEP and the second PEP are virtual PEPs created upon request for <sup>said</sup> ~~said~~ <sup>(a)</sup> ~~(a)~~  
3 particular service by one of the first NRC and the second NRC.

\* 1 18. (Currently Amended) The method as defined in claim 9, wherein the first  
2 PEP and the second PEP are virtual PEPs created upon request for <sup>said</sup> ~~said~~ <sup>(a)</sup> ~~(a)~~  
3 particular service by one of the first NRC and the second NRC.

~~Canceled~~

\* 1 19. ~~(Currently Amended)~~ An apparatus that establishes services that utilize  
2 policy-enabled resources in a communications network, comprising:  
3 a first network resource controller (NRC) within a domain on the  
4 communications network, said first NRC requesting, from available policy-enabled  
5 resources, any policy-enabled resources required to establish a particular service;  
6 a virtual first policy enforcement point (PEP) residing on a network element  
7 of the communications network that is created upon requesting the particular

service, said virtual PEP identifying policy-enabled resources that are available and allocating requested policy-enabled resources to the particular service;

a resource policy layer (RPL) that establishes the particular service and includes including a policy description protocol decision point (PDP), wherein the virtual PEP is provided with information to contact the PDP of the RPL in order to provision the policy-enabled resources allocated to the particular service.

*Canceled*

\* 20. (~~Currently Amended~~) A method of establishing services that utilize policy-enabled resources in a communications network, comprising:

requesting, from available policy-enabled resources at a first network resource controller (NRC), any policy-enabled resources required to establish a particular service;

creating a virtual first policy enforcement point (PEP) upon requesting the particular service;

identifying, at the virtual PEP, policy-enabled resources that are available and allocating requested policy-enabled resources to the particular service;

providing the virtual PEP with information to contact a policy description ~~protocol~~ decision point (PDP) of a resource policy layer (RPL);

establishing the particular service with a first resource policy layer (RPL);  
and

14 provisioning, to the particular ~~established service being established at the~~  
15 ~~resource-policy-layer (RPL)~~, the policy-enabled resources allocated to the particular  
16 service.